VIRGINIA WILDLIFE

OCTOBER 2007

FOUR DOLLARS

J. Carlton Courter, III
Director

As fall approaches and temperatures begin to cool, hunters across the Commonwealth look forward to spending time in the outdoors. Anyone who has ever attended a Hunter Education course will tell you that buck fever isn't the focus of a successful hunting season; safety is. Long before Hunter Education became mandatory in Virginia in 1988, hunting safety has been a priority for the Department of Game and Inland Fisheries. This magazine alone has dedicated many pages to promoting firearms safety and ethical sportsmanship. Our conservation police officers and thousands of Hunter Education volunteers have carried that message to Virginians.

Since the introduction of mandatory Hunter Education in 1988, the Department has certified over a half million men, women and children with an interest in hunting. This is an impressive milestone for this program and for the Department. We know that through Hunter Education we have made a difference in making hunting a safe sport. In fact, the National Shooting Sports Association tracks accident rates of sports and finds that cheerleading causes greater injuries than hunting. While one hunting accident is too many, we experience relatively few for the hundreds of thousands of hunters who go afield each year.

Virginia's 10-hour Hunter Education course, which has been recognized as one of the best in the nation, covers not only safe handling of a firearm, but also safe handling of archery tackle; treestand safety; first aid; how to properly care for harvested game; ethics; landowner relations; conservation; wildlife identification; wildlife laws; and more. The course is free of charge and is taught statewide. To find a course near you, visit our Web site at www.dgif.virginia.gov and enter your zip code to search for a class within your area.

Another mandatory requirement that has made a huge difference in hunting safety is the use of blaze orange. Since 1987, hunters and those accompanying them are required to display blaze orange during general firearms season for deer. I encourage hunters to consider wearing or carrying blaze orange whenever you enter the woods during a hunting season. The minimum is 100 square inches visible from 360 degrees which translates into a baseball cap, easy enough to stick in your pocket and take with you.

As you plan your hunts, in addition to safety, think about how you can introduce someone to hunting and the enjoyment that can be found in the outdoors. I remind you: it takes a hunter to make a hunter. Be that someone.

Report Wildlife Violations
1-800-237-5712

Mission Statement

To manage Virginia's wildlife and inland fish to maintain optimum populations of all species to serve the needs of the Commonwealth; to provide opportunity for all to enjoy wildlife, inland fish, boating and related outdoor recreation; to promote safety for persons and property in connection with boating, hunting and fishing.

Dedicated to the Conservation of Virginia's Wildlife and Natural Resources

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About the cover: Virginia's wild turkey *(Meleagris gallopavo)* population is estimated to be approximately 180,000 birds. Populations vary across the state, with the highest population densities in the Tidewater, southern mountains, and south Piedmont regions. Acorns are favored foods of wild turkeys. Oak crops have a significant impact on fall turkey harvests. The harvest declines in years with good mast crops as flocks move less and typically stay in forested areas making them more difficult to locate and hunt. Conversely, during mast failures birds move further in search of food and typically are seen in fields and clearings making them more vulnerable to hunting and predation. ©John R. Ford

VIRGINIA WILDLIFE

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The Examin

"TO HIM who in the love of Nature holds
Communion with her visible forms, she speaks
A various language; for his gayer hours
She has a voice of gladness, and a smile
And eloquence of beauty, and she glides
Into his darker musings, with a mild
And healing sympathy, that steals away
Their sharpness, ere he is aware."

William Cullen Bryant ("Thanatopsis" 1821)

ed Life

story by Megan Mckinley
photos by Dwight Dyke

Standing on a rock outcropping, miles of the Shenandoah National Park stretch before us as a reminder of past days. The leaves change colors and cling with everything they have to the connection that keeps them from falling. So we too cling to the rock, the land, afraid to move too close to the edge. Watching what were once the green buds of spring turn to the vibrant colors of fall, it is hard not to contemplate the cyclical nature of life. But that is why we come to the mountains this time of year, to reflect and observe.

Shenandoah National Park, established December 26, 1935, encompasses over 195,000 acres of Virginia's rugged mountains and rolling hills. With more than 500 miles of hiking trails, 150 miles of horseback trails, and 105 miles of Skyline Drive, the park provides easy access to all visitors whether you care to walk, ride or drive.

Forest, consisting of more than one hundred species of trees, covers over 95 percent of the park. This variety of trees in a protected wilderness provides a wonderfully unique vista in the fall not easily found so close to

The Shenandoah National Park is one of the most visited national parks in the United States. The Park's diverse topography ranges from 561 feet at its lowest elevation to 4,049 feet atop Hawksbill Peak, making it a favorite destination to witness the brilliant colors of fall.

major population centers in this day and age. And while crowds flock to the park at certain times, a short walk will often discover solitude.

Though the hardwood forests offer spectacular views in the fall, there is more to do than simply stand and look. The park boasts dozens of streams containing both stocked and native trout. A little research and a hike into the woods with rod and reel in tow and one can discover their own private trout stream for the afternoon. The Shenandoah River also meanders through part of the park, offering excellent smallmouth bass fishing or just a pleasant afternoon float in a canoe or raft.

So often it seems too hard to get away, to drop everything and load the family in the car and head to the mountains. We are all busy, too busy sometimes to even look on as the beauties of life unfold before us. The

turning leaves of fall in Shenandoah National Park put on a display each year that is nearly unparalleled within the country. As the days shorten and the nights become cool and crisp, they turn to yellow, purple, red and gold as vehicles to say, "that we lived, that we were once beautiful." We owe it to ourselves sometimes to just watch.

Megan Mckinley graduated from the University of Georgia where she studied English and Journalism. She currently works as Director of Development for Blue Sky Fund (http://blueskyfund.org), a foundation dedicated to providing outdoor opportunities for inner-city kids.

For more information on Shenandoah National Park go online at www.shenandoah.national-park.com or www.nps.gov/shen.

Hunting D

©John R. Ford

A VDGIF Conservation Police Officer creates a unique "Wildlife Poachers Hall of Shame" designed to influence and educate people on the importance of ethical hunting behavior.

by Ken Perrotte

A Virginia turkey poacher's illegally-taken trophies are now opening eyes of both novice and experienced hunters as part of a display of one man's greed.

Indeed, the "greed" theme dominates this Hall of Shame exhibit. The word is spelled out in capital letters atop one panel, creatively crafted using the sharp spurs from dozens of turkeys.

The goal is to make sure hunters see those spurs and get the point, said Special Agent John Cobb, of the Virginia Department of Game and Inland Fisheries, the law enforcement officer who made the bust in Caroline County in 2006.

own

Cobb handcrafted the exhibit, which also includes beards from 81 mature gobblers, photos seized in evidence, and a large turkey tail fanned open.

Conservation Police Officers dubbed Jason W. Cook, a former Spotsylvania County Animal Control Officer, a "serial wild turkey poacher" based on the nearly 100 criminal counts he was charged with in Caroline and Richmond counties.

Cook, who was 30 at the time of his arrest, pled guilty to eight of the most serious offenses in Caroline County and under a pre-sentencing agreement received 15 days in jail with the remainder of the six-month sentence suspended upon condition of good behavior. He was also levied more than $10,000 in fine and court costs, including $3,500 in "Wild Turkey Replacement Costs" for seven turkeys killed illegally in 2006 and a donation of $3,500 to the Virginia Game Protection Fund.

Beyond the jail time and fines, he lost all hunting rights in North America for seven years and the ability to transport any game animals or birds in Virginia for seven years. And, he has also been banned for life from hunting at Fort A.P. Hill, where a number of the crimes occurred. Cook was also sentenced in Richmond County to 100 hours of community service.

One of the key teaching points Cobb makes in a special tutorial associated with the display is that voluntary compliance with game laws is the ultimate goal. Hunters should follow the law because it is the right thing to do and they shouldn't tolerate those among their ranks who disregard the law.

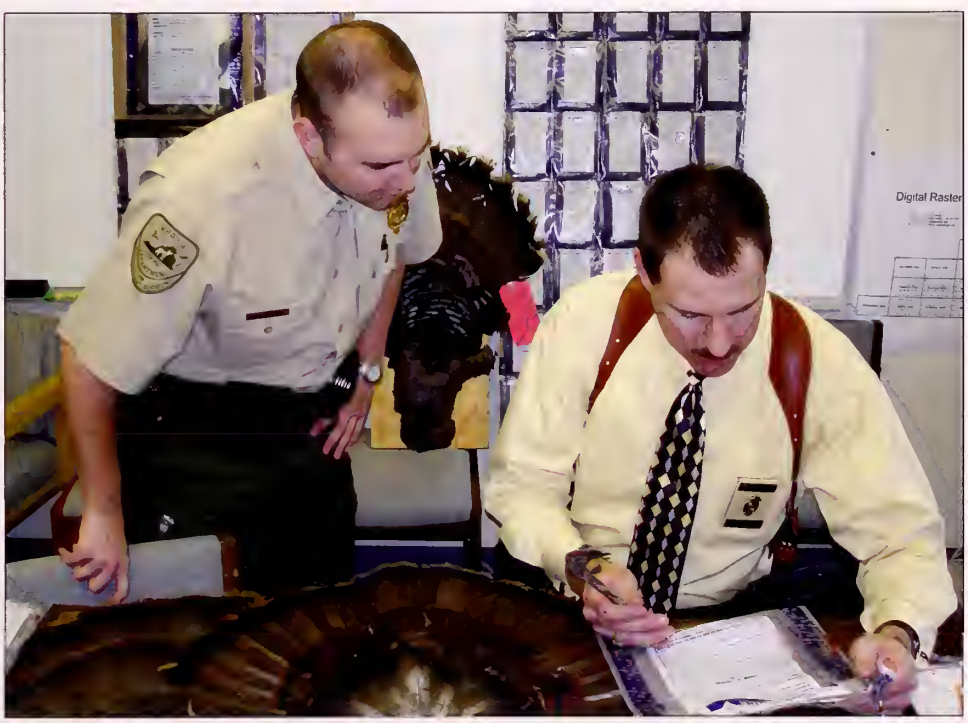
Obviously, voluntary compliance failed with Cook, but one sportsman who was unwilling to tolerate another infraction by the poacher "dropped the dime" (as the saying goes) and called a Conservation Police Officer.

The final straw for the person who gave the tip came when Cook took his 5-year-old son hunting at Fort A.P. Hill on the 2006 special youth turkey hunting day set aside for kids 15 and under each year.

As Cobb explained, Cook reportedly took his child's shotgun from the youngster's hands and shot an approaching turkey as the youngster watched.

"He apparently did this even though the youngster had learned how to use the shotgun and could put the pellets on the target," Cobb said. "To take a youth shotgun from your kid's hand—we knew what we were dealing with."

Following the tip, Conservation Police Officers staked out Cook's



©Ken Perrotte

VDGIF Conservation Police Officers John Cobb (right) and Ryan Shuler look over nearly 200 pieces of evidence seized during a search of Jason Cook's home.

house. They didn't have to wait long. Shortly after sunrise on April 20, 2006, Cook pulled up to the house, leaving his driveway and parking near a basement access door.

Cobb said he and fellow Conservation Police Officer Ryan Shuler observed Cook retrieve a wild turkey carcass and take it inside. He emerged 20 minutes later wearing his Spotsylvania uniform and carrying a black trash bag, which was later found to have the unwanted parts from the turkey.

Confronted later in the day, Cobb said Cook "denied killing or even touching a wild turkey that day." This provided the ammunition to obtain a search warrant.

The bird, it turns out, had been killed in Richmond County that same morning.

Cook's house was a treasure trove of turkey parts. The search turned up 81 adult male turkey beards, dozens of turkey legs and spurs and several sets of tail feathers.

Cobb said Cook confessed on tape that some 90 percent of the 81 gobblers had been killed illegally over his 15 years of hunting.

"Over the last three years, we could only find evidence that Cook had legally checked one turkey," Cobb said. The legal annual limit is three birds, but Cobb said Cook confessed, after being read his rights, that in April 2006 alone he killed nine turkeys and had shot at and missed three others. Cobb said Cook boasted, "I can promise you…that's it right there; you just can't get any better than that."

Cobb said Cook confessed to taking as many as 12 turkeys in a year and as many as four in a single day, although at least one of the photos taken in evidence, and now prominently displayed in the exhibit, shows him posing with a dog and five freshly killed turkeys. Numerous other photos of Cook alone with multiple birds were also collected in evidence. Some photos with turkeys showed him in a uniform with a badge, partially obscured by leafy camouflage.

"I asked him why he did what he did, and he told me, 'The adrenaline rush,'" Cobb said.

The poacher's sentiment stuck in Cobb's craw and he helped exorcise the aggravation by addressing it in the written tutorial he developed to accompany the display.

"Hunting should never be just about killing animals for an adrenaline rush, and it is certainly not a 'competitive' sport where a score needs to be kept in order to win. As most true hunters already know, sport hunting is about the entire outdoor experience," Cobb wrote.

Cook's eventual plea agreement took two months to arrange, Cobb said, adding the state agreed to drop lesser illegal possession charges related to many of the turkey beards found.

Richmond County attorney Wayne Emery, who first prosecuted the case in his home county, volunteered to be a special prosecutor in the case had it reached trial stage in Caroline, according to Sgt. Paul Atkins, also a Conservation Police Officer.

Cook's sentence also called for writing a letter of apology. Part of his letter to the "Sports Men and Women of the Commonwealth of Virginia" read, "My goal was to go as often as possible during spring turkey season and try to be successful. I did not realize I may be taking opportunity away from others, however looking back now I realize I made a mistake and I am truly sorry for it."

Cobb, Virginia's Conservation Police Officer of the Year for 2006, said, "You usually never want to see people lose their job over a hunting violation, but he (Cook) was in the wrong line of work. He had to have known better about what he was doing everyday."

Fortunately, Cobb believes the vast majority, 95 percent or more, of hunters taking to the woods care about protecting our wildlife resources and want future generations

©Ken Perrotte

The Turkey Poacher Exhibit was on display for nearly 300 people who attended the annual banquet of the National Wild Turkey Federation Fredericksburg Chapter. Needless to say it ruffled a few feathers!

Lee Walker

The portable Turkey Poacher Exhibit displays the greed of one individual. The exhibit was recently on display at the Virginia Sportsman Show and the Virginia State Fair.

to have the same or better hunting opportunities.

"They do what they know is the right thing based on their own established set of hunter ethics. The remaining five percent are poachers," he explains in his exhibit's tutorial.

Cobb is also quick to differentiate between hunters who sometimes make mistakes, the consequences of which do not affect wildlife populations, and wildlife criminals such as Cook who "overkill wild animals in order to serve their own selfish needs and desires."

Fear of detection deters some criminals. Others are caught because they repeatedly violate game laws, increasing the chance others become aware of their illegal activity. In most cases, as with Cook, it begins with a tip and the turkey poaching exhibit reinforces the reporting of game law violations as not only the right thing to do, but as a duty.

The poaching display has been used extensively since Cobb used his woodworking skills to build it at his home.

Its public debut came before a Hunter Education class in Caroline County, but the second time it was opened for display was before nearly 300 people at the annual banquet of the National Wild Turkey Federation's Fredericksburg Chapter. Coincidentally—some might say, "poetically"—this grand unveiling at the banquet came on the evening of the 2007 Youth Spring Turkey Hunting Day.

Chapter past president Tom Worrell examined the display and said, "I think it's a good way to drive home the point. It definitely catches your eye.

"It's important for young folks, and all hunters, to understand that if you hunt birds legally, you'll enjoy it more and get more satisfaction. Every time someone takes an illegal bird, they're taking it away from someone that might have taken it legally. This is an important ethic to pass along to young people."

Ten-year-old Jesse Albert of Caroline County brought his father Don over to look at the massive collection of turkey beards and spurs. As he began counting each bird represented on the board, Jesse remarked, "I think it's cool, but not that he did it in an illegal way."

Jesse's dad, Don, was more direct, "They should have made more of an example out of him."

Adding a belief that hunters need to help police their own ranks, he said, "One bad guy can ruin a whole hunting club; it's just a shame."

That is the kind of visceral reaction and priming of hunters for action when they encounter illegal or unethical behavior that makes Cobb smile.

"This display, capturing the greed of one individual, will help show in a dramatic way how much these types of people steal from law-abiding hunters," Cobb said. "It also shows they do get caught." □

Ken Perrotte is a writer and outdoor columnist for the Fredericksburg Free-Lance Star, *who lives in King George, Virginia*

More Information

To arrange for a VDGIF law enforcement professional to give a presentation or simply attend a meeting of outdoor enthusiasts, please call 804/367-1000 and ask for the Law Enforcement Division.

The Virginia Department of Game and Inland Fisheries established a Crime Line to make reporting wildlife violations easier call: 1-800-237-5712 or e-mail: wildcrime@dgif.virginia.gov.

Outdoor enthusiasts can also ask their local Conservation Police Officer (Game Warden) about starting a Wildlife Crime Watch Program in their area.

Land of Blue

"You know enough now. Go out into your community and do some good."

story and photos by Gail Brown

The force of those words, spoken in the spring of 1998 by St. Paul High School (SPHS) teacher Terry Vencil to the school's first Appalachian Ecology class, shot over the Clinch River Valley like a flash of lightning. Vencil's challenge sparked young minds eager to show just what they could accomplish, and in the tiny mountain town of St. Paul, things were never to be the same again.

Vencil's students took her admonishment seriously, but no one, not Vencil, not the kids, and not the town council realized how wide the floodgates of change had opened. St. Paul's citizens were about to be swept up in events that would positively impact their community economically, politically, socially and educationally. Change was definitely in the air.

Senior Stevie Sabo decided his project would be to clean up Lake Estonoa, a small lake covered with invasive plants and debris that lies adjacent to the school parking lot. As Stevie walked through the weeds surveying the mess and formulating ideas for his project, he had no way of knowing that by the time he finished college a two-story building de-

Above: The Virginia Naturally School Recognition Program helps increase environmental awareness and stewardship of our youngest citizens.
Left: St. Paul High School teacher Terry Vencil and student Virginia Burton hold an award from President Bush recognizing Team Estonoa's accomplishments.

Students from St. Paul Elementary learn about the natural world at Estonoa.

signed to serve as a center for environmental studies (and named for his exuberant teacher and her husband, Dean) would rise on that very spot.

Research for Stevie's project led him to the town historian and the story behind the creation of the lake: Estonoa is a Native American word for Land of Blue Waters and the whole valley was once called Estonoa. The lake was formed in the early 1900s when the wet area of a cornfield was dammed up to create a swimming hole for the town's kids. The lake fell on hard times after the

Waters Virginia Naturally

town built a real pool, and over the years the abandoned swimming hole became an easy victim of household trash.

The following fall, junior Nikki Buffalow made the project her own when she devoted her considerable energy and numerous hours to working with the United States Corps of Engineers to get the lake recognized as a wetland; after that her struggles intensified as she fought to obtain the easements needed for the school to access the property surrounding the water. Undaunted, she continued to chip away at all resistance until success was hers. By the spring of 2000, with a grin from ear to ear and the easements in her hand, Buffalow presented Vencil with the papers needed to make the students' dream to reclaim the wetland a reality.

Stand quietly on the path and you will observe and hear different species of wildlife.

While things got a little easier when the Physics and Appalachian Ecology classes decided to join forces and form Team Estonoa—their name for a new organization dedicated to conserving and protecting their wetlands—things also got a bit more complicated as the kids continued to set higher goals for themselves. But once united the camaraderie they experienced, affecting students and staff alike, grew exponentially in the corners and hallways of the school just as the project gained momentum with each tire and battery hefted out of the water.

This is the story of how the kids at St. Paul worked with city leaders and environmental agencies to save a wetland on the brink of becoming an additional parking lot. It's a tale of how everyone came together to raise thousands of dollars and work hundreds of hours to build an environmental center. And it's a tale of how kids with great spirit and determination earned an invitation to both the White House, where they accepted an award for their environmental efforts from the President of the United States, and to Sea World in California, where they accepted a $10,000 award for their center! Perhaps all that has happened and continues to happen at SPHS can best be summed up by Team Estonoa's motto—*Remember When You Were Young and Thought You Could Change the World? We Are!*

Above: Students evaluate the turbidity of the water. Right: Working in the field is the way to learn science. This student is testing for dissolved oxygen.

During the spring of 2001, students, teachers and parents used waders, gloves, nets and muscle to remove invasive plant species, install 119 tons of hand-laid gravel, plant 330 Native Appalachian wetland flora (17 species), and construct two foot bridges, a dock, and a large span bridge. The work was unending!

Above: Is that a snail in there? Right: Team members and volunteers logged over 2,000 hours of service last year. Below: Older students are mentors and educate the community about Estonoa.

It wasn't long before Team Estonoa determined that what they now needed was a learning center—a building that would give them the classroom space needed to continue their work and also to educate others about watershed protection. With a "roof over their heads," the students could more easily continue maintenance work on the wetlands, teach others about Estonoa, and have classroom space dedicated to learning more about watershed protection and Appalachian ecology.

Under the guidance of Vencil and mentors like Blaine Delaney of the Black Diamond Resource Conservation and Development Council, St. Paul students wrote and received numerous grants totaling over $260,000 from such agencies as the Virginia Environmental Endowment, United States Department of Agriculture–Rural Development, ARC (Appalachian Regional Commission), the Canaan Valley Institute, and most recently Learn and Serve Virginia–Department of Education.

While many obstacles delayed their plans, and goals had to be revised and adjusted, by the spring of 2005 SPHS and Team Estonoa opened the doors of an impressive environmental learning center, complete with a log and natural stone exterior, a large classroom, kitchen, two handicapped accessible bathrooms, and all the furniture needed to host town meetings and environmental initiatives.

Rescuing and maintaining the Estonoa Wetlands is truly a student-driven project, complete with stories of sacrifices, acts of generosity, and demonstrations of leadership skills far beyond the expectations we normally hold for such young adults. In the words of Estonoa member, Virginia Burton, "This project has taught me the most valuable lesson of all: never to limit myself. With the guidance of our mentor, Terry Vencil, and our many partners, we, a group of high school students, have truly made a difference in the world around us. I can honestly say I am proud to be a part of the project and call it my own."

Senior Meg Musick shares this thought: "It's a place where I can take my children and grandchildren and say I helped with this. When I go other places they will talk about Estonoa and St. Paul and I am extremely proud to know I am a part of it all."

Future plans include writing grants and working to restore a turn-of-the-century home located adjacent to the wetlands. Once restored it would serve as a bunkhouse for groups attending environmental workshops and studying the ecology of wetlands. Achieving that goal will require considerable sacrifice and hard work, but then...

Remember when you were young and thought you could change the world?

Gail Brown is a retired principal for Chesterfield County Public Schools. She is a lifelong learner and educator, and her teaching and administrative experiences in grades K-12 have taught her that project-based environmental programs teach science standards, promote core values, and provide exciting educational experiences for the entire community.

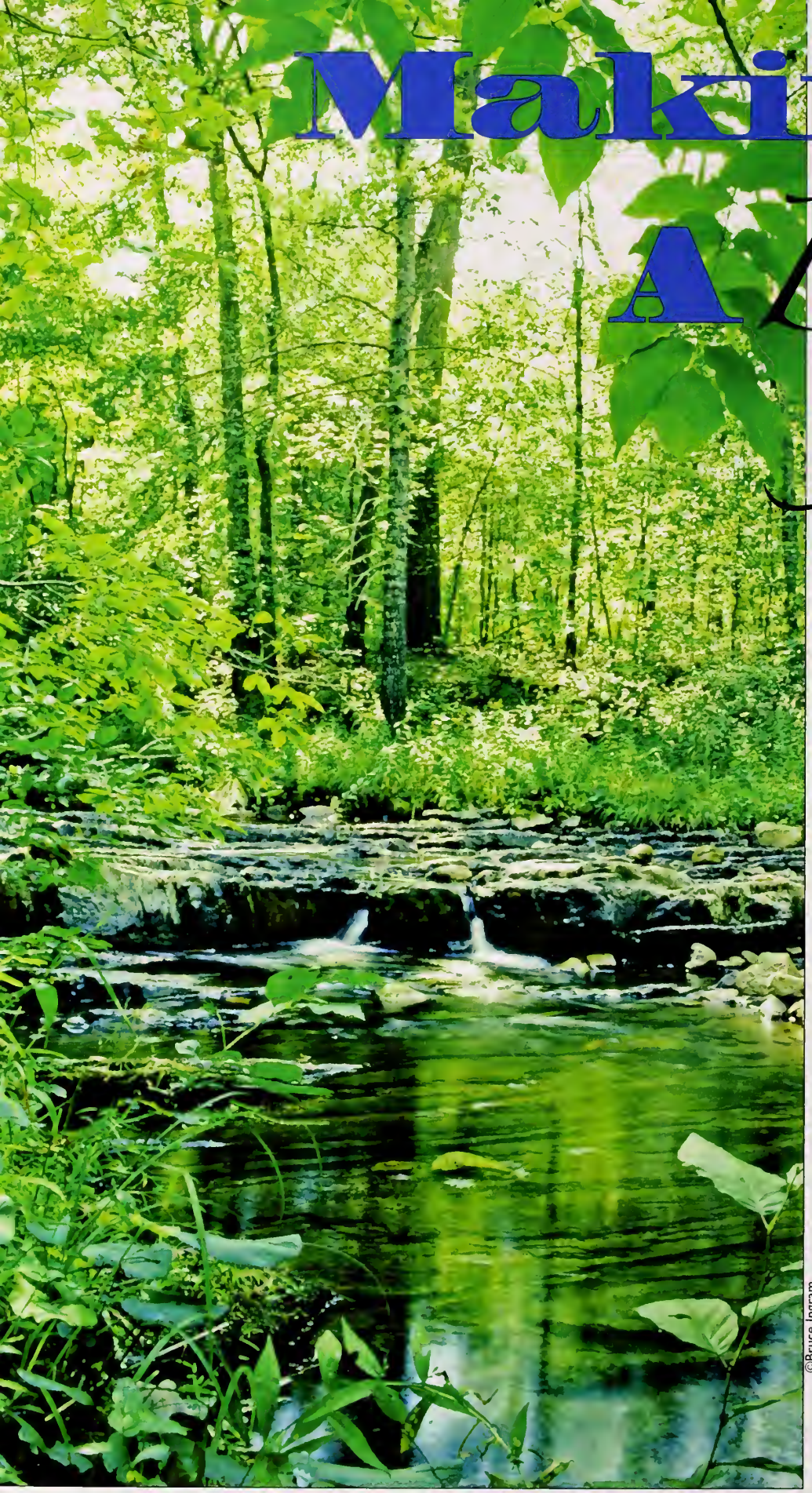
Making A Differ

After 77 years, Ray Hundley, a farmer, hunter and conservationist, still believes that one of the best ways to preserve Virginia's natural resources is to lead by example.

by Bruce Ingram

As someone himself who has put 272 acres of Craig County land under a conservation easement, I always like to call other people who live near my Botetourt County home and have likewise placed their properties under an easement. And so it was that I contacted Ray Hundley and his wife Faye who live outside of Gala.

When I did so, I received an invitation from 77-year-old Ray to visit the couple's 800-acre farm. Before going, I called Roger Holnback, executive director of the Western Virginia



©Bruce Ingram

The Hundleys have placed a conservation easement on Sinking Creek, a scenic tributary of the James River that runs through their property—just one small step in protecting the water quality of Virginia's rivers.

©Bill Lea

Land Trust (WVLT), to learn more about the particulars of the Hundley's easement. The couple has placed a riparian easement on 32 acres of streamside habitat along 2.6 miles of Sinking Creek and one of its tributaries.

"Ray and Faye Hundley have been good stewards of their land since they bought it back in the early 1950s," Holnback told me. "Sinking Creek is a beautiful, clear cold water stream—shaded by overhanging native trees and full of native wildlife—that feeds into the James River. Just the type of stream that we are trying to preserve in order to protect Virginia's water supply at its source.

"Ray told me that if he ever sees mud in the water, weather permitting he heads upstream to find out what has caused it, whether the cause is natural or man-made. If all those who own river and creek frontage cared for their streams like the Hundleys do, we wouldn't have nearly the water quality and quantity problems we have. So those of you who use water on down the James—including Richmond—can thank the Hundleys

Deer Management Assistance Program (DMAP)

Matt Knox, the game department biologist most responsible for keeping tabs on Virginia's deer herd, is a huge booster of DMAP.

"DMAP is probably our most popular deer management program," he says. "Most people think if it as a QDM (Quality Deer Management), because 85 percent of our DMAP cooperators (covering 1.2 million acres) practice some form of QDM. But DMAP is much more versatile than that.

"The secret to me is that DMAP has no stated objective, it is an open ended deer management program which we tailor to meet the objective of the landowner/club. Also, because they are all required to collect data from every deer they kill, DMAP cooperators and the hunters that hunt on these properties become much more knowledgeable about deer biology and management. It is a win-win situation for the department."

DMAP began in 1988 with 56 cooperators on land totaling 960 acres. In 2004, there were 800 cooperators on acreage totaling 1,410,000 acres. For more information, consult the DGIF's Web site: www.dgif.virginia.gov.

©Bruce Ingram

One of the most impressive things about 77-year-old Ray Hundley, is his curiosity about all things wild. When we were driving across his property, he spotted a shrub that he did not know that was in bloom. Ray stopped, examined the plant and later identified it as a fringe-tree. Above all else, Ray and Fay Hundley have always tried to lead by example as good stewards of the land and wildlife

for helping to protect their water supply."

When I arrived at the Hundley's farmhouse, the couple invited me to come sit at their kitchen table. Once there, they peppered me with questions concerning current conservation topics of interest: had I heard about the rediscovery of the ivory-billed woodpecker, why were whip-poor-will numbers down, what did I know about mountaintop mining? Then I asked why they had placed a conservation easement on their property.

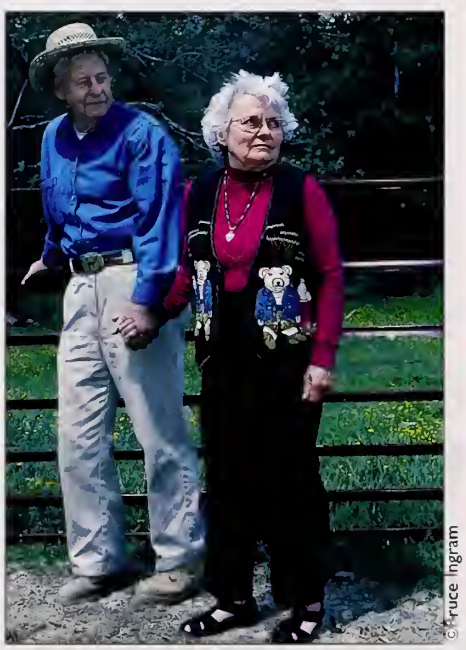
"To save the land for the future, for our grandkids, or whoever owns the land in the future," Faye told me. "To protect this little part of nature forever."

Ray agreed.

"I've always been a hunter and interested in wildlife," he said. "It's so important for the future of hunting and wildlife to protect habitat. Another thing is that I thought when water got to costing more than gasoline, it was time to start protecting the water. That's a major reason why we put an easement on the land protecting our creeks."

Faye then added that water would be the most precious commodity to the people of the 21st century, comparing its importance to petroleum, which she believes was the most important commodity of the previous 100 years. Ray then praised the work of the WVLT.

"Roger Holnback was so helpful to us and answered all our questions," said Ray. "He walked over the land with us and told how we could protect the creeks. A landowner isn't alone when he places an easement on his property. He has somebody like Roger to answer questions and help monitor things. That was an assurance to Faye and me. And it was an assurance to us that we were doing something good for future generations. Of course, it doesn't hurt that conservation easements can reduce the taxes on your land."



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Many landowners mistakenly believe that they can not continue to conduct normal management practices on their properties if they place easements on them. Such is not the case. For example, Hundley recently wanted to create some habitat diversity in the forested part of his farm by doing some logging, plus, obviously, earn some money from the cutting. Toward that end, he carried out three eight-acre blocks of clear cutting, each of which followed the natural contour of the land. And none of which came within 200 feet of the easement protected streams.

DMAP for Better Deer Hunting

Just as the Hundleys have of late placed a conservation easement on their land, they have become recent fans of the Virginia Game Department's Deer Management Assistance Program (DMAP) initiative.

"I've always been interested in deer hunting and management," said Ray. "I wanted to improve the quality of the deer here, not just create bigger bucks. So I contacted the Department. Biologist Jay Jeffries came over, examined the land, and recommended that our goal be to kill more does and fewer bucks.

"That wasn't a hard thing for me to do. But I have to admit that, at first, it was hard for some of the people that hunt on the place. Back when I started deer hunting in the 1940s, we killed whatever the law said we could kill—which meant mostly bucks of whatever size or age. But times have changed, and many places, including my own, have too many does. The old way of thinking that killing a buck is always better than killing a doe is no good, now."

Ever since DMAP has been in place on his land, Ray says that more does than bucks have been harvested every year. And the animals that have been killed are weighing on average 10 pounds more than previously harvested whitetails.

Ray Hundley: Tree Stand Innovator

I was amazed to learn that Ray Hundley holds the patent for the first tree stand with a seat.

"When I first began bowhunting back in the 1950s, Benny Griffith of Fincastle and I would hunt together in Botetourt and Craig counties," recalled Ray. "We didn't do very well—partly because there weren't many deer and partly because the ones that were around kept spotting or smelling us on the ground. So Benny came up with the idea that we should climb up in a tree and hunt from there.

"The first deer that I ever killed with a bow, I was standing on a tree limb, 12 feet off the ground. But it was so uncomfortable and dangerous standing or sitting on those limbs that I had to come up with a better way."

One evening, Hundley and Griffith were discussing better ways to bowhunt, and the former proposed that if he could design a tree stand, could Griffith, a shop teacher for Botetourt County Public Schools, build it? They were able to do so and then the two men tried to patent their creation. They learned from a patent attorney that an individual in Germany had already designed a similar stand.

"So to make our stand different, I designed one that had a fold up seat. When you buckled the stand around a tree, your weight would hold you in position when you sat. According to the patent office, that was the first tree stand with a seat in the world."

Deer and Turkey Hunting Wisdom

Spend any tme around Ray Hundley, and the subject will turn to deer and turkey hunting. I asked him to share his favorite tips, based on him being a hunter for over 60 years.

- ✔ "For deer, the most important thing is that you got to be there, you can't kill a deer sitting in the house," laughed Ray. "I will go before daylight and hunt until around 1:00, then come back out around 3:00, and hunt until dark. Most of the big bucks I have killed have been between 9:00 and 11:00."
- ✔ "For big bucks, always hunt the ridges in the mornings," he said. "That's always true except during the rut when the bucks can be anywhere."
- ✔ If you want to kill a mature gobbler, don't call so much, which is what too many people do," said Ray. "If he hears you, he knows where you are. Make that gobbler come hunting for you, instead of the other way around."
- ✔ "If a gobbler seems to be more interested in his hens than he is in your calls, make him want to fight," said Hundley. "Make some fighting purrs and start a commotion."

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Bruce Ingram is the author of The James River Guide, The New River Guide, *and* The Shenandoah/Rappahannock Rivers Guide. *To obtain a copy contact Bruce Ingram at P.O. Box 429, Fincastle, VA 24090.*

Conservation Easements

For more information on conservation easements, contact the following:

Virginia Outdoors Foundation
www.virginiaoutdoorsfoundation.org

Western Virginia Land Trust
www.westernvirginialandtrust.org

New River Land Trust
newriverlandtrust.org

Valley Conservation Council
www.valleyconservation.org

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of the Mo

Clapper Rail

King Rail

story and illustrations
by Spike Knuth

Seldom seen but often heard, rails are very secretive birds that are adept at running or creeping about in tall marsh vegetation. They almost always remain hidden in the cover of dense rushes, sedges and other vegetation, hesitant to fly, coming out only at dusk and during the night to feed along muddy marsh edges. They have laterally compressed bodies that make it easier for them to squeeze through tall emergent vegetation. Some have long slender, curved bills; fairly long, strong legs; long (not webbed) toes; short, rounded wings; and short, pointed tipped up tails. Their flanks are barred with white or off white. They range in size from the sparrow-sized black rail to the 19-inch king rail. Little is known about most of them, especially the nesting and feeding habits of the black and yellow rails.

Rails build nests of decayed or decaying marsh vegetation, some in wet tall areas, the smaller rails in shorter drier marshes, usually with an arch of living grasses over the top. Anywhere from 8–13 eggs are laid. Incubation usually takes 13–17 days and once hatched, the young are mostly glossy black in their natal down and are precocial; able to run about shortly after. Most of all these species fledge within two weeks or so.

They tend to be weak fliers, barely skimming over the tops of the tall marsh plants with legs dangling then suddenly dropping down as if exhausted or shot. Due to their

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feeble-looking flight it makes one wonder how they can migrate at all and, in fact, many appear in strange locations during migration. Some land on ships out to sea, others may show up in a suburban backyard, around city buildings, or in a mountain valley.

Clapper Rail

(Rallus longirostris)

While secretive, the clapper rail, in particular, is a noisy bird that utters a grating "kac-kac-kac," a common summer sound along Virginia's Eastern Shore and Chesapeake Bay marshes. The "clapping" or "clicking" calls (like sticks being hit quickly together), are most often heard at dusk

Measuring 14–16 inches, the northern clapper rail (one of eight subspecies or races) are grayish brown above with slightly more brownish and lighter underparts, with decidedly grayer cheeks and a darker cap. The long, curved bill is for probing in marsh mud, and the flanks show white bars on brown, edged in black. The tail is carried cocked upward revealing a white under tail patch.

The clapper rail is a master at creeping and slipping through heavy growths of salt marsh cordgrass and other marsh vegetation as it searches for food. Only occasionally will it suddenly appear on the outside edge of a tidal creek or marsh at low tide to probe for shrimp, fiddler crabs, mollusks or snails in the mud, only to dissolve back into the maze of emergent vegetation.

The northern clapper rail breeds from Maine to Virginia and tends to be the only migrant of all the subspecies. Most of them spend their winters from South Carolina to Florida. They return in spring to their breeding marshes, with nesting beginning in April.

The nests are usually located just above the normal high tide line, and storms, with winds out of the northeast during high tide, will occasionally wash nests and eggs away and sometimes drown the newly hatched young. Re-nests are normally completed by August. While some rails may winter over, most migrate by November, and the marshes again fall silent of the clapping calls of the clapper rail.

Virginia Rail

King Rail

(Rallus elegans)

Measuring 15–19 inches, the king rail is the largest member of the rail family. It is similar to the clapper rail but more reddish in color. Many ornithologists believe they are subspecies of the same bird.

The big difference is that the king rail generally inhabits freshwater marshes or adjacent grass and grain fields. Only rarely will it be found in brackish or salt marshes except during migration or on its wintering grounds. Its calls are similar to the clapper rail; a deep, slow, "kick-kick-kick." They feed mainly on a variety of aquatic animals and plant seeds

Their spring migrations are mainly along the Atlantic Coast and the Mississippi River Valley and they often return to the same marshes every year. King rails nest in eastern United States from southern Canada,

south to the Gulf Coast, and east to the Atlantic. King rails move south starting in August and September and winter along the Atlantic as far north as New Jersey and along the Gulf Coast.

Virginia Rail

(Rallus limicola)

While fairly common in fresh, brackish and saltwater marshes, the Virginia rail is rarely seen by the casual observer. Usually it is the bird's call that draws attention to its presence. In spring, during breeding, its call is a metallic clicking sound, described as "kid-ick, kid-ick, kid-ick."

The Virginia rail is about 8–11 inches long. It is basically olive-brown above, streaked with black, with reddish-brown underparts, and black flanks barred with narrow lines of white. Its cheeks are ashy-gray, with a white throat, a white "eye brow," and dark crown.

Virginia rails are found in Virginia year round along the coast, but breed as far north as southern Canada from coast to coast. Nesting begins in April in either fresh or brackish marshland.

Virginia rails are most active at twilight, feeding on the mudflats as they probe for small crustaceans, aquatic insects, small fish, worms, small snakes and terrestrial insects. In addition, they will eat duckweed, seeds of grasses, and berries.

From their northerly breeding grounds they migrate south in September and October, mainly at night. On the East Coast they winter from New Jersey to Florida, along the Gulf states, and south to Cuba.

Sora

(Porzana carolina)

The first time you hear the cackling, laugh-like call or "whinny" of the sora, you might think a bird of the jungles has somehow gotten into the marsh. The sora is a small rail, measuring about 9 inches in length. They spend most of their time hidden from view, deep in the tangles of marsh vegetation, feeding in the mud on various insects, mussels and other small, marsh-dwelling animals, as well as various seeds of marsh plants like wild rice.

They tend to be nocturnal in their feeding habits, usually getting active at dusk. This is when they often step out of the thick marsh vegetation, walking chicken-like, along the edges where mud flats are exposed. Though cautious, soras are curious birds, and just throwing a stone into a marsh or making a clapping noise is often met with a responding chorus of calls and chuckles.

Often called the Carolina rail, the sora's colors are basically olive-brown above with some feathers edged in white. Its underparts are gray and its flanks are heavily barred with white and dark olive-brownish or brownish-gray. It has a black face and throat patch and yellow bill.

Sora Rail

The sora breeds over most of southern Canada from coast to coast, and in the northern tier of states as far south as Maryland and west to Kansas. It favors freshwater marshes, but will nest in brackish marshes on the coast, with a special liking for cattail marshes or wet meadows near water.

When startled and flushed, the sora rises, seemingly with great effort, in weak, fluttery flight. It makes one wonder how this bird is able to migrate as much as 3,000 miles or more to places like Venezuela and Peru. Occasionally they land on vessels hundreds of miles at sea to rest. Many will winter around the Carolinas south to the Gulf Coast.

Yellow Rail

(Coturnicops noveboracensis)

Due to its secretive habits, yellow rails are seldom seen. It is considered one of the mystery birds of the marsh although it is probably more abundant than sightings may indicate. So elusive is it that most are found at night given away by their calls.

Yellow rails are about 5–8 inches long with a yellowish plumage. Its back is dark brown with wide yellowish stripes, and a small yellow bill. If it does fly it shows white wing patches. Its call consists of insect-like clicking or ticking notes, much like the rapping of two stones together. They seldom flush and it can seemingly snake its way through the thick vegetation, almost more like a small mammal. They feed mainly on small snails, aquatic insects and seeds of aquatic plants.

Not much is known about their nesting habits, but it appears to favor wet meadows of shorter vegetation. The yellow rail's breeding range covers most of southern Canada and northern United States. They arrive to these areas in April–May, and

Yellow Rail

begin nesting. Yellow rails depart their breeding grounds in late September and October to winter along the Atlantic Coast from North Carolina to Florida and west along the Gulf Coast.

Black Rail

(Laterallus jamaicensis)

Very little is known about this sparrow-sized rail. If it is seen, it's usually only a brief glimpse, and you may not be sure of what you had seen. Ornithologist Alexander Sprunt, Jr., referred to it as a feathered mouse, because it crawls mouse-like through the marsh.

The black rail is basically dark gray or black overall, with a scattering of white spots or edgings on its back. Its upper back is chestnut colored. It has dark gray under tail coverts and flanks, barred with white or light gray.

Its call is uttered mostly at night and has been described as "kee-kee-doo," or "ki-ke-kir." Most birds are discovered and seen at night by playing tapes of its call, and then the males will appear to challenge the "intruder." Not much is known about its eating habits but it has been found to feed on small crustaceans, small mollusks, amphipods, aquatic insects and plant seeds.

Black rails breed in April and May in eastern and central United States, and from Ontario into New England and the Eastern Shore of the Chesapeake Bay. In coastal areas, they favor higher parts of the coastal marshes in salt hay, black rush, salt marsh cordgrass, reed grass and others. Inland they prefer drier areas as well as wet, grassy marsh edges.

Black rails winter mainly along the Gulf Coast from Texas east to Florida and along the Atlantic Coast to southern Georgia, as well as Jamaica and Guatemala. □

Spike Knuth is an avid naturalist and wildlife artist. For over 30 years his artwork and writing have appeared in Virginia Wildlife.

Be Wild! Live Wild! Grow Wild! is a regular feature that highlights Virginia's Wildlife Action Plan, which is designed to unite natural resources agencies, sportsmen and women, conservationists and citizens in a common vision for the conservation of the Commonwealth's wildlife and habitats in which they live. To learn more or to become involved with this new program visit: bewildvirginia.org.

Black Rail

A Grand Exp

With a lot of good will and hard work a new and unique experience called The Living Cave/Living River program is helping to inspire the next generation of environmental stewards.

story and photos
by Kathy O. Adams

A new experience is waiting for local sixth-grade students at Grand Caverns in Grottoes, Virginia. In an effort to get students to think about how they interact with their environment on a day-to-day basis and how they can take care of it in the future, volunteers have created the Living Cave/Living River program. The program was designed to meet the curriculum requirements for a "Meaningful Watershed Experience," which requires every Virginia student to have at least one watershed or stream experience before graduating (see sidebar, pg. 27). Eight stations around the park introduce students to chemical and biological aspects of the South River and the geology of the area and teach students how to conserve renewable and non-

Opposite page: Students identify fish species from the South River in Fish School. Recently a bluehead chub built a nest in the display. Left: Charmaine Detrow guides students through Grand Caverns. Below: Students from Beverly Manor Middle School collect water from the South River for water chemistry testing.

gram has been such a success that it is now available to the public by appointment. Volunteers who are passionate about the environment teach students about topics like alternative energy sources, rainwater percolation, and riparian buffers. The students respond by answering questions and racing to the next station, always wanting more. Based on the student responses and feedback from educators, program organizers continually tweak program content and approach. The combination of flexibility and energy keeps the stations fresh and fun for students and is the cornerstone to the success of the Living Cave/Living River program… even in its infancy.

erience

renewable resources. The result is a day where students use analytical thinking to question themselves and their actions. Program organizers and volunteers hope that with all of the information learned, the students will be able to make informed decisions about the environment and take care of the earth that they are inheriting. Sandy Greene of the Headwaters Soil and Conservation District and a key program organizer describes her goal: "I would like happy kids, waving to you (even though sixth-graders are too cool), and saying 'I want to come back.'"

With an overwhelmingly positive response to the program, she may have achieved her goal. The program is fast paced and action-oriented, with flexibility built into the various stations. Although the stations are designed to help educators fulfill curriculum requirements, the pro-

Sixth-graders get a closer look at South River wildlife.

Are You Smarter than a Sixth-Grader?

Participate in the Meaningful Watershed Experience program and you'll learn the answers to the questions below. Here's a pop quiz to see if you're smarter than a sixth-grader getting back on the bus after a day of learning and fun at Grand Caverns Regional Park. Answers are provided below.

1. What are the three primary minerals present in Grand Caverns?
2. What color is the side stripe on a rainbow trout?
3. Does the presence of caddisfly larvae indicate good or poor water quality?
4. How many endangered bat species live in Virginia?
5. Which direction does the South River flow (north, south, east, or west)?
6. Where can we sustainably get 10,000 times the energy we need each day?

Answers:
1. calcite, manganese, iron
2. pink or red
3. good
4. 15
5. north
6. the sun

Betty Gatewood, a MAT teacher-in-residence with the Environment-based Learning Program at Mary Baldwin College, integrates hand-held technology into the water chemistry station using temperature probes.

A sixth-grader scoops water from the South River to determine its turbidity.

Turning an Idea into Reality

The idea was born simply, with a few phone calls between Sandy Greene and Paul Bugas of the Department of Game and Inland Fisheries (DGIF). The two talked and brought in Andrew Wells, Executive Director of the Upper Valley Regional Park Authority. Grand Caverns was in the midst of expanding its offering to the public and its location on the river seemed the perfect spot to educate students and the community about the environment. DuPont expressed interest in the project and made a monetary donation to build the aquarium.

The project began, as Sandy Greene says, "when the weather cleared" in March. The team devoted two weeks of time and then time here and there to convert the Caverns' gift shop and some storage rooms into station areas. Greene describes the project as an evolving one that required a trial and error approach. Using "every possible piece of goodwill that anyone would give," the team recruited local organizations for

Sandy Greene (right), of the Headwater Soil and Conservation District, leads students on a percolation hike, pointing out birds, turtles and garlic mustard plants along the way.

What is a Meaningful Watershed Experience?

A Meaningful Watershed Experience is just one of the requirements of the Chesapeake 2000 Agreement, which was created to encourage all citizens of the Chesapeake Bay watershed to work toward a common goal: a system with abundant, diverse populations of living resources, fed by healthy streams and rivers, sustaining strong local and regional economies, and our unique quality of life. The agreement outlines many goals, which, if met by 2010, will remove the Chesapeake Bay from the Environmental Protection Agency's impaired waters list.

The Living Cave/Living River program was created to satisfy specific educational standards of learning for Virginia sixth-graders and allow students to have a Meaningful Watershed Experience, which is a new requirement for all high school graduates. The experience has three parts:

* Research- and standards-based activities in the classroom
* Inquiry-based field investigations
* Student action

Before arriving at Grand Caverns, students are given a solid foundation in many of the station topics. As part of the standard sixth-grade curriculum, students learn about geologic formations and groundwater. With that knowledge in hand and good walking shoes, students conduct field investigations at the various Living Cave/Living River stations. The final part and key aspect of a Meaningful Watershed experience is action. Specific programs and activities encourage the students to implement what they have learned with the goal of reducing pollution and improving water quality.

supplies and manpower (see sidebar, pg. 28). It worked. Just two months later, the first bus of sixth-graders arrived.

Integrating and Applying Classroom Knowledge

Eight stations around the park keep the students moving and integrating their classroom knowledge with hands-on experiences. The stations are designed to allow students to weave learnings from one station into the next. Between the time they hop off the bus at the park to the time they depart, the students see the inside of a cave, make a soil sample sundae, create a living sculpture, hike down Percolation Trail, power a neck massager with bike pedaling, catch a caddis larvae, cook up pollution, identify and feed fish, and perform chemical tests on South River water…among other things. Andrew Wells noted, "There are so many elements that ingrain the experience on them." Throughout the experience, the students are challenged to integrate new ideas with what they already know. The result is out-of-the-box thinking and a day where students learn through fun.

For some students, the field trip marks their first visit to the cave at Grand Caverns, the oldest show cave in the United States. (Public tours have been provided in the caverns since 1806.) For recent sixth-grade visitors, Grand Caverns Education Coordinator, Charmaine Detrow, lit a candle and turned out the lights to show what it would be like to explore the cave in its early years. Gasps of "Wow!" materialized and one student noted excitedly, "that was pure dark!" Being in the cavern brings dimension to what students already learned in the classroom. Some formations in the cave remain a mystery, and the students are challenged to help solve it.

In Fish School, each student receives a tackle box with information about one particular fish native to the South River. Then, they take a quiz and identify their fish in the 450-gallon aquarium, built by Jason Hallacher of DGIF and stocked with native fish. While feeding the fish, volunteers at the station discuss the ecological balance in the river and give examples of the consequences when the system is out of balance, such as the ongoing fish kills in the South Fork of the Shenandoah River (which is fed by the South River). Next door to Fish School, the macroinvertebrate lab created by Richard Landis and donated by DuPont is stocked with bottom dwelling critters from the

Students locate parts of the Chesapeake Bay watershed on a map.

Volunteerism at its Best

The eight exhibits and overall program at Grand Caverns Regional Park were developed and are sustained through the collaborative efforts of volunteers. Sandy Greene describes the team of volunteers that made the Living Cave/Living River idea a reality as people "who did not let go." From Karen Ryland who painted a beautiful mural to Keith Folsom who helped design the fish tank, the volunteers put their heart and soul into the project. With a tight schedule and sweat equity, the team found solutions to problems and invented ways to make the watershed experience at Grand Caverns what it claims to be—meaningful. Volunteers from the following organizations provided financial support, donated materials, and/or supplied the manual labor necessary to make the program a success:

- Virginia Department of Game and Inland Fisheries
- Headwaters Soil and Water Conservation District
- South River Science Team
- DuPont
- Springdale Water Gardens
- Earth Team Volunteers
- Virginia Naturally
- Upper Valley Regional Park Authority
- Trout Unlimited
- Emporer Aquatics
- Alpha Industries
- Izaak Walton League

Although program development work is complete, the work in the trenches continues. Volunteers are always needed to man stations and work with the students and public. If you're interested in volunteering, contact Sandy Greene at 540-248-6218 ext 3.

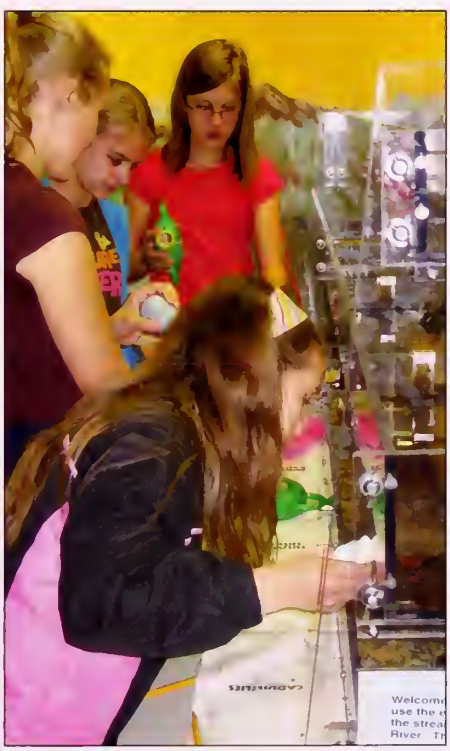
Above: Students cook up pollution with their teacher Mary Katherine Graham. The recipe teaches students about the importance of buffers along rivers and streams. Below: Volunteers, like Dennis Patzig, from the Trout Unlimited Harrisonburg Chapter, help students examine critters in the macroinvertebrate lab.

South River. Students use a turkey baster to pick up critters like caddis larvae and mayfly nymphs and inspect them through a magnifying glass. Screams of "I got one!" and "Can we try to pick up something else?" from sixth-graders on a recent field trip show that this fun, interactive station achieves its goal: to help students identify different macroinvertebrate species that are indicators of South River water quality.

At one station located along the South River, students quantify and prove or disprove their own predictions about the water quality of the river. The students test their predictions with tools such as hand-held water temperature probes. During a recent field trip, students were surprised when results indicated good water quality in the South River. With good water quality as the goal, the students were then encouraged to brainstorm ways they could help improve the water quality of streams and rivers near their home or school.

Challenges to Achieve Change

Throughout the program, volunteers challenge the students to reflect upon what they have learned, develop ideas, and turn their ideas into action. Through a National Oceanic & Atmospheric Administration (NOAA) grant, Betty Gatewood, a MAT Teacher-in residence with the Environment-based Learning Program at Mary Baldwin College, picks up where the Grand Caverns experience ends by working with students during the action phase of a "Meaningful Watershed Experience." The action could be planting a schoolyard garden, adopting a stream and monitoring it, or planting trees or shrubs along creek beds. Regardless, these activities mark the final phase and ultimate goal of the program.



Much like the volunteers turned the initial idea of the Living Cave/Living River into a reality, with generous donations and an in-kind grant from Virginia Naturally, the program inspires the next generation to harness their energy and ideas, acting to improve current environmental conditions and solve future challenges. □

Kathy O. Adams is a freelance writer and technical editor with Writing Unlimited in Hockessin, Delaware. She has enjoyed exploring Virginia caves and parks throughout her life.

Journal

2007 Outdoor Calendar of Events

October 5-7: *Eastern Shore Birding and Wildlife Festival,* Cape Charles.

October 6: *Deer and Turkey Archery seasons open* statewide.

October 13: *Bear Archery season opens* statewide.

October 20: *Outdoor Beach Women,* Munden Point Park, Virginia Beach, in cooperation with Virginia Beach Parks and Recreation. Learn fundamental of outdoor skills. For more information and to register contact Jimmy Mootz at 804-367-0656 or jimmy.mootz@dgif.virginia.gov.

October 27: *Fall Turkey season opens* in certain counties.

For more information on hunting seasons, pick up your copy of *Hunting and Trapping in Virginia* or go online at www.dgif.virginia.gov. □

Readers Comments

Passenger Pigeon

I very much enjoy reading *Virginia Wildlife* magazine and especially looking at the pictures. A few years ago I started trying to carve some native birds that were featured in *Virginia Wildlife*. The latest bird that I have carved is a passenger pigeon, which was featured in the June 2007 issue. I also thought it fitting to mount the passenger pigeon, which is now extinct, on the base turned from American chestnut wood. Carving is one of the many ways I am able to express my love for the outdoors.

Fred A Buckles
Meadowview

"Fred, you've been hunting a long time, haven't you?"

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Annual College Undergraduate Writing Competition

Below is the winning entry for the college undergraduate writing competition sponsored by the Virginia Outdoor Writers Association, Inc. Winners were announced at their annual business and awards meeting on June 19, 2007.

"How Experiences in the Outdoors Have Driven My Career Choice"

by Josh Johns

It is funny how the watershed periods in our lives, the moments that determine the courses that our lives will eventually follow, can seem so insignificant when they actually occur. For some people, the power of those times may not be recognized until years later. For me, the recognition of those moments that led me into the field of natural resources has come gradually, and brought with it an appreciation for those who shared nature with me.

There is a family to whom I owe a great debt of gratitude. They took me into their family, shared the outdoors with me, and invited me on trips that would open my eyes to the natural world. They loved God and loved the outdoors, and they shared those loves with me. This family, the Corys, came about shortly after Mr. Cory, a park ranger, met the future Mrs. Cory in a national park. It was a match made in the woods! When I came on the scene at age 13, Kasey, their oldest son was a competitive mountain bike racer; Meriah, their middle child was as avid an outdoorswoman as a 13-year-old can be; and Samuel, their youngest, was my friend.

I had a pre-existing interest in the outdoors before I met the Corys, but it had never extended beyond catching frogs in the ditches of my suburban neighborhood. The Corys took that interest and expanded it. My first experiences with caving, mountain biking, backpacking, primitive camping, rock climbing, rappelling and tramping through streams in the woods came from my relationship with them. I remember vividly a four day backpacking trip in the Beartooth Mountains in Montana. After setting up camp next to a stream so cold that it could only have been created by a snow-melt, we quickly built a fire near the bank, threw on shorts, and jumped in. It was an experience unlike any I had known before; not only was I in a group that was acting with complete spontaneity, but I had never appreciated a campfire more in my life! In addition to providing me with these experiences, the Corys introduced me to some of my first hobbies: mountain biking and hiking. All of this came about because they were willing to take the time to educate a kid who was completely clueless about the outdoors. I didn't know it then, but seven years later I would be emulating their service to me.

I see now that my early teen years, spent in the woods with the Corys, greatly enhanced my love for the outdoors, and especially for biking. Biking became my main hobby throughout my teens. It was on the bike that I had bought for riding with Samuel that would carry me to his old house the week after he and his dad died in an avalanche. It was on the same bike that I traveled the C&O three times with friends. It was my biking that led my pastor's wife to ask me if I could help her boys learn to ride safely. It was her request that would lead me into a new passion for both the outdoors and for children.

Being asked to teach children how to ride safely resulted in me taking a group of boys, including my 11-year-old brother, who I had taught how to ride, on a series of trips in Prince William County Forest Park. It didn't take long for me to realize that I, like the Corys, love sharing my passion for the outdoors. My only difficulty in taking the children into the woods was getting them to stop talking about their video games for even a few consecutive seconds. However, I soon found that the drive of a boy to be wet and dirty, to skip rocks and throw sticks, and to discover all things log-covered, can trump even video game conversations. Our smaller bike trips turned into larger bike trips, and eventually to full camping trips on the C&O and hiking Old Rag as a group. Our ventures into the outdoors continue each summer, when I return home to whining from my group of boys, now boy scouts, who can't understand why I have not taken them camping in so long. Now when we go out, I no longer fight video games to draw their attention to nature. Now it is "conversations" about girls that I must contend with to show those guys the veins in a leaf or a bird in the canopy!

The time spent with that group of boys out in the woods helped to change my mind about what I wanted to do with my life. Gone were the thoughts of engineering and the Marine Corps. There was a new desire in me to teach people about God's creation in God's creation. My motivation changed to sharing with others what the Corys had shared with me. As a result, I decided to try a job as a camp counselor, to see if children and the outdoors were really something that I could invest a career in. That summer leading nature walks and teaching fire-making was the greatest that I have ever had. I became sure that a career as a park ranger or teacher is right for me.

Today I am a natural resource conservation major, but that's not really who I am. I am really just a person to whom the outdoors was opened by a wonderful family, and in whom an interest for the outdoors was grown. I am a person to whom doors were opened to share his passion with others. Now I am a person who is simply growing in knowledge of what he can share. I am infinitely grateful for the love of the outdoors that was shared with me, and I, in turn, will always share this passion that was such a wonderful gift to me!

The deadline for submitting photographs for the 2007 *Virginia Wildlife* Photography Contest is December 1, 2007. Winning photographs will appear in the special March 2008 issue of *Virginia Wildlife* magazine. For more information, visit the Department's Web site at: **http://www.dgif.virginia.gov/events/photocontest.pdf.**

On The Water

by Jim Crosby

Customizing Your Small Boat!

In shear numbers, small craft outnumber all the other recreational watercraft by more than two-to-one. Canoes, kayaks, dinghies, johnboats, and such tend to dominate the recreational boating industry.

Checking the offerings of dealers, you will find such a variety of shapes, sizes and colors that they will absolutely astound you. Boat building used to be limited to what you could do with wood. Fiberglass offered a whole new world of design possibilities and soon pretty well dominated boat construction.

Now we have additional new materials that are particularly popular in small craft. Polymer materials such as polystyrene, polypropylene, polyethylene, and polyurethane have brought great new techniques to boat building. That coupled with high-pressure molding means small craft can be mass produced that are light, strong and completely impervious to weather deterioration. Of course, high-pressure molded plastics do not float and must incorporate built-in pockets of flotation to keep them off the bottom when flooded.

Going one step further; you will also be astounded by the personal modifications made to those offerings you can find in use on our rivers, ponds, lakes and reservoirs. The possibilities are limited only by ones imagination.

I wanted a stable platform from which to take pictures. I wanted it to be propelled by a quiet electric motor so I could sneak up on wildlife on the many water impoundments around the state that offer fantastic opportunities for wildlife observation and photography.

I had a 10-foot round bottom dinghy that just didn't fill the bill. It was too tipsy and unstable to meet my picture taking needs. So I found a multi-hull, pontoon type boat of the same length that seemed to have some possibilities. I choose the Pelican Bass Raider 10. It has extra large pontoons for superior stability and weight capacity—just the ticket for my needs. My wife and I took it out for a test run. We found it to be very stable, and it moved through the water efficiently and quietly. The only thing it lacked was a dry, safe place to rest my cameras and other equipment. The gunwales were too risky for stuff getting knocked overboard and the deck wasn't a good place to put anything you really didn't want to get wet.

After several weeks of drawing, thinking and analyzing, I came up with a modification plan.

I put a grid of wooden boards on the deck to lift anything on it out of any residual water lying there—an excellent addition. I still needed a good, high and dry resting place for my cameras, etc.

I fabricated a console about elbow high with a shelf below the top surface. I added a lip of molding around the edges of the top and the shelf so objects placed there would not slide off and fall. I built this all out of marine plywood and treated it with a stain and wood preservative. In the center of the boat, I mounted the console to the floorboards because you can't really screw anything to the molded plastic itself and have it stay there under any tugging and pulling. This made a secure mount and placed the console between the two swiveling seats that made the console available to either person.

©Jim Crosby

On our first excursion, we ran aground and put our prop in the mud. To avoid this, I mounted a depth finder on the console that not only monitors the water depth but also monitors the water temperature and battery usage so you don't get stuck without "go" power.

On the second outing, we found this worked real well and even offered a place for our sandwiches during the lunch break.

I really got carried away and mounted a GPS opposite the sonar. Well it does give me speed, direction and location.

On our first launch after the modification, I was very concerned about how much weight I had added to the boat and whether or not I may have jeopardized its stability. A careful evaluation revealed we had not exceeded its capacity or made it unstable—a very important consideration when modifying a small craft.

I now have exactly what I wanted to pursue my photography of wildlife and it is also perfect for fishing too because that is what it was originally designed for. □

Share your questions, concerns or suggestions with me at: jecrosby@comcast.net.

Photo Tips

by Lynda Richardson

Capture the Color of Fall Foliage

One of the most anticipated months of the year for nature photographers is October, when the landscape turns into a breath-taking kaleidoscope of color. Oaks, red maples and black tupelos burn brilliant red amid glowing yellow hickories and tulip poplars. Add a neon blue sky with white puffy clouds and you have a stunning pallet for the creation of amazing photographs.

Well, if you have a colorful leaf year. Some years, the leaves are more brilliant than others and this is partially due to the right (or wrong) combination of temperature and light. As autumn days become shorter, a succession of warm, sunny days followed by cool, but not freezing nights, normally produce the best foliage color.

Deciduous trees normally start changing in the far western part of the state the first week of October and slowly progress to the East Coast by the end of the month. Normal peak season for the Shenandoah Valley region falls mid-October. You can actually check for current updates by calling the Virginia Fall Foliage Hotline, 1-800-434-LEAF (5323).

The best time of the day to photograph fall foliage is early morning or late afternoon when the sun is low on the horizon. As the sun rises, bright light can create deep shadows and wash out color, so don't even bother shooting during the middle of the day. Overcast days are fantastic for capturing rich color all day long but normally overcast means white skies. On these days, I would recommend avoiding or minimizing the sky in your photos.

There are two filters that can help you create more saturated photographs. One is called an "enhancing" filter which "pumps up" reds, rustic browns and oranges leaving other colors untouched. Of course, you could always use the "saturation" adjustment in PhotoShop, just don't overdo it! As leaves tend to be shiny, causing distracting reflections, a circular polarizer is great for eliminating this problem. If shot at a 90 degree angle from the sun, polarizers will not only reduce reflections on leaves, and water, but will also make your blue skies bluer!

"Don't forget to look at your feet when capturing fall foliage!" © *Lynda Richardson*

A brilliant blue sky can provide an outstanding backdrop for those colorful trees but have you looked down yet? Sometimes the best fall foliage images are captured on the ground. Look for piles of fallen leaves at the base of trees. Take a walk along a river or stream and watch for brightly colored leaves perched on dark rocks or spinning in a water whirlpool. Shoot extreme close-ups. How about reflections in water? The possibilities are endless!

As the land becomes a spectacular pallet of color, be sure to grab your camera and try your hand at capturing the unmistakable celebration of fall. Happy Shooting! □

You are invited to submit one of your best photographs to "Image of the Month:" *Virginia Wildlife* magazine, P.O. Box 11104, 4010 West Broad Street, Richmond, VA 2323-1104. Please send original slides, high quality prints, or high res jpeg files (300 dpi) on a disk, and include a self-addressed, stamped envelope or other shipping method, for return. Also, include any pertinent information regarding how and where you captured the images and what camera and settings you used. We look forward to seeing and sharing your work with the readers of *Virginia Wildlife* magazine!

Image of the Month

Congratulations to Jeff Barker, of Lynchburg, for his delightful photograph of a spooky ghost crab. Jeff captured this eerie nighttime image with a Sony Cyber-Shot 5.1 megapixel digital camera with a 3X optical zoom using the macro setting. Jeepers creepers, Jeff! Great shot!

RECIPES

by Joan Cone

Why Waste Tough Goose?

Canada geese have a long life span. This creates problems for many cooks. After you have cooked your goose, it may be too tough to enjoy. The answer is to use your processor and either chop or shred the cooked breast meat. Following is a recipe for dealing with a tough goose.

Menu

Goose Pot Pie
Citrus Pecan Salad
Jell-O Magic Mousse
Cranberry Orange Bread

Goose Pot Pie

One-Dish Bake & Rise Batter
Cooking spray
1½ cups flour
1 tablespoon parsley flakes
1 tablespoon sugar
½ teaspoon salt
2 envelopes rapid rise yeast
1 cup very warm milk (120° to 130° F.)
1 large egg
2 tablespoons vegetable oil

Filling
3 tablespoons butter or margarine
2 tablespoons chopped onion
3 tablespoons flour
Salt and pepper to taste
½ teaspoon poultry seasoning
2 cups low sodium chicken broth
1½ cups frozen mixed vegetables, thawed
2 cups of cooked diced or shredded goose

Mix batter ingredients together in a pre-sprayed 8 x 8-inch baking dish. In a medium saucepan, melt butter over medium heat. Add onion and cook 2 minutes or until tender. Stir in flour, salt, pepper and poultry seasoning until well blended. Gradually stir in broth and cook, stirring constantly, until bubbly and slightly thickened. Add vegetables and goose.

Top the batter with goose mixture.

Bake by placing in a COLD oven. Set temperature to 350° F. and bake for 30 minutes or until baked through. Serves 4 to 6.

Citrus Pecan Salad

1 bag (10 ounces) mixed salad greens
2 cans (11 ounces each) mandarin orange segments, drained
½ cup real bacon bits
½ cup pecan halves
⅓ cup balsamic vinaigrette dressing

Mix first 4 ingredients in a large bowl. Add dressing and toss lightly. Makes 6 servings.

Jell-O Magic Mousse

3 cups boiling water
1 package (8-serving size) your favorite flavor gelatin
1 tub mold (16 ounces) Cool Whipped Topping, thawed

Stir boiling water into dry gelatin mix in medium bowl at least 2 minutes until completely dissolved. Add whipped topping to hot gelatin; stir with wire whisk until topping is completely melted and mixture is well blended. Mixture still will be thin. Pour into 16 ounce (6-cup) Cool Whip tub mold sprayed with cooking spray. Refrigerate 8 hours or overnight until firm. Dip mold in warm water for about 15 seconds. Unmold onto serving plate just before serving. Makes 10 servings, about ½ cup each. Store leftover dessert in refrigerator.

Cranberry Orange Bread

¼ cup butter, softened
1 cup sugar
1 egg
1 teaspoon grated orange peel
2 cups flour
1 teaspoon baking powder
½ teaspoon salt
½ teaspoon baking soda
¾ cup orange juice
1 cup chopped fresh or frozen cranberries
1 cup golden raisins

Preheat oven to 350° F. In a large mixing bowl, cream butter and sugar. Beat in egg and orange peel. Combine the dry ingredients and add to creamed mixture alternately with juice. Fold in cranberries and raisins. Pour into a greased 9 x 5 x 3-inch loaf pan. Bake at 350° F. for 60 to 65 minutes or until a toothpick inserted near center comes out clean. Cool for 10 minutes; remove from pan to a wire rack to cool completely. Makes 16 slices. □

VIRGINIA WILDLIFE OUTDOOR CATALOG

2007 Limited Edition Virginia Wildlife Collector's Knife

Our 2007 Collector's knife has been customized by Buck Knives. This classic model 110 folding knife is 8 1/2" long when fully opened and has a distinctive, natural woodgrain handle with gold lettering. Each knife is individually serial numbered and has a mirror polished blade engraved with a fox. Our custom knife comes in a solid cherry box with a collage of foxes engraved on the box cover.

Item #VW-407 $90.00 each (plus $7.25 S&H)

VW-114

VW-112

VW-120

Virginia Wildlife Caps

Our caps feature three unique designs. Each cap is 100% cotton, size adjustable and embroidered with the *Virginia Wildlife* logo. $11.95 each

High profile -	Camo with Black Letters	- Item #VW-113
High profile -	Blaze Orange	- Item #VW114
High profile -	Camo with Tan Letters	- Item #VW112
High profile -	Virginia Wildlife	- Item #VW120
Low profile -	Virginia Wildlife	- Item #VW119

To Order

Visit the Department's Web Site at:
www.dgif.virginia.gov
or Call (804) 367-2569

Please allow 3 to 4 weeks for delivery.

Virginia Wildlife DVD

"A Professional Guide to Field Dressing, Skinning and Butchering White-Tailed Deer."

This video was produced to give you step-by-step instructions on how to field dress a deer as demonstrated by VDGIF Wildlife Biologist Ron Hughes. Then, professional butcher and hunter education instructor Rob Bingel demonstrates the best way to cape out a deer for mounting. The video really gets good when he shows in detail how to de-bone and professionally butcher a deer using only a knife and a hacksaw.

By the end of the video you will learn how to make butterfly chops, de-bone a front shoulder, tie up a roast using a butcher's knot, be able to identify all the proper cuts of meat on a deer, and more!

Item#VW250 $12.00 Includes S&H

Virginia Wildlife Music CD

Virginia Wildlife is excited to offer a compelling and lively array of classic Celtic and Appalachian music that celebrates Virginia's wildlife and natural resources. This musical journey is composed and performed by Timothy Seaman, of Williamsburg, Va., along with guest appearances from other musical masters. (Total time 66:32 min.)

Item #VW-219 $10.00 each

The New 2008 *Virginia Wildlife Calendar* Is Now Available

It's time to purchase the new 2008 Virginia Wildlife Calendar. For more than 20 years the Department of Game and Inland Fisheries has been publishing one of the most informative and beautiful wildlife calendars in the country. This special addition of the Virginia Wildlife Calendar highlights 12 of the 925 species of greatest conservation need identified in the Virginia Wildlife Action Plan. This comprehensive wildlife conservation strategy unites natural resource agencies and citizens through a common vision and concept for the conservation of the Commonwealth's wildlife and habitats in which they live.

An important component of the Virginia Wildlife Action Plan is participation of citizens from around the state to get involved with wildlife conservation efforts. By purchasing the new 2008 Virginia Wildlife Calendar you not only get 12 months of incredible wildlife viewing, but you also take that first step in helping to bring awareness to important wildlife issues facing our state.

Virginia Wildlife Calendars make great holiday gifts and are only $10 each. They begin with January 2008 and run through December 2008. Quantities are limited, so order now! Make check payable to: Treasure of Virginia and send to Virginia Wildlife Calendar, P.O. Box 11104, Richmond, VA 23230-1104. If you would like to use your VISA or MasterCard you can order online at www.dgif.virginia.gov. **Please allow 4 to 6 weeks for delivery.**

To learn more about the Virginia Wildlife Action Plan visit www.bewildvirginia.org.

For Virginia Wildlife subscription calls only 1-800-710-9369
Twelve issues for $12.95
All other calls to (804) 367-1000
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